



## **The Linxian trials: mortality and cancer rates by vitamin/mineral intervention group**

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**Abstract:** Two randomized intervention trials are being conducted in Linxian, an area of north central China with some of the world's highest rates of esophageal and stomach cancer and a population with chronically low intake of several nutrients. One trial employed a factorial design enabling the assessment of the effects among nearly 30,000 participants of daily supplementation with 4 nutrient combinations: retinol and zinc; riboflavin and niacin; vitamin C and molybdenum; and beta-carotene, alpha-tocopherol, and selenium. The second trial provided daily multiple vitamin/mineral supplementation vs placebo among 3318 persons with esophageal dysplasia, a precursor to esophageal cancer. After 5.25 years supplementation in the general population trial, significant reductions in total and cancer mortality were observed among those receiving beta-carotene, alpha-tocopherol, and selenium, but not the other nutrients. After 6 years supplementation in the smaller dysplasia trial, reductions in total and cancer mortality were observed, but these were not significant. The presentation will review these findings, and for the first time provide estimates of the relative risks of cancer and other diseases associated with the interventions separately by age and sex.